



NATURAL RESOURCES CONSERVATION SERVICE
(NRCS)

OH-ENG-233s
03/00

ANNUAL LIVESTOCK DEATH LOSS CALCULATIONS (Swine)

Landowner:		County:	
Designer:	Date:	Checked:	Date:

Typical Mortality Losses for Swine Production (%)

Stage of Growth	Average Wt. (Lbs.)	Design Wt (Lbs.)	Excellent	Good	Poor
Birth to Weaning	6	10	Under 10	10 - 12	Over 12
Nursery	24	35	Under 2	2 - 4	Over 4
Growing \ Finishing	140	220	Under 2	2 - 4	Over 4
Breeding Herd	350	350	Under 2 / yr	2 - 5 / yr	Over 5 / yr

Source: Pork Industry Handbook – 100; for breeding herd the mortality % is an annual rate for the average number of head on the farm

PRODUCTION

NUMBER OF PIGS BORN PER YEAR (Pre-Weaning):

$$\frac{\text{_____}}{(\# \text{sows})} \times \frac{\text{_____}}{(\text{litters/yr.})} \times \frac{\text{_____}}{(\text{pigs/litter})} = \frac{\text{_____}}{\# \text{pigs born/year}}$$

NUMBER OF NURSERY PIGS PER YEAR:

$$\frac{\text{_____}}{(\# \text{pigs born/yr.})} - \left(\frac{\text{_____}}{(\# \text{pigs born/yr.})} \times \frac{\text{_____}}{(\% \text{ loss/100})} \right) = \frac{\text{_____}}{\# \text{nursery pigs/yr.}}$$

NUMBER OF FINISHING HOGS PER YEAR

$$\frac{\text{_____}}{(\# \text{nursery pigs/yr.})} - \left(\frac{\text{_____}}{(\# \text{nursery pigs/yr.})} \times \frac{\text{_____}}{(\% \text{ loss/100})} \right) = \frac{\text{_____}}{\# \text{finishing hogs/yr.}}$$

TOTAL POUNDS DEATH LOSS PER YEAR (use “average weight” to calculate death loss)

$$\frac{\text{_____}}{(\# \text{ sows} + \text{gilts} + \text{boars})} \times \frac{\text{_____}}{(\text{Avg. Wt.})} \times \frac{\text{_____}}{(\% \text{ loss/100})} = \frac{\text{_____}}{(\text{Lbs. loss/year})}$$

$$\frac{\text{_____}}{(\# \text{ pigs born/ yr.})} \times \frac{\text{_____}}{(\text{Avg. Wt.})} \times \frac{\text{_____}}{(\% \text{ loss/100})} = \frac{\text{_____}}{(\text{Lbs. loss/year})}$$

$$\frac{\text{_____}}{(\# \text{ nursery pigs/ yr.})} \times \frac{\text{_____}}{(\text{Avg. Wt.})} \times \frac{\text{_____}}{(\% \text{ loss/100})} = \frac{\text{_____}}{(\text{Lbs. loss/year})}$$

$$\frac{\text{_____}}{(\# \text{ finish hogs/ yr.})} \times \frac{\text{_____}}{(\text{Avg. Wt.})} \times \frac{\text{_____}}{(\% \text{ loss/100})} = \frac{\text{_____}}{(\text{Lbs. loss/year})}$$

TOTAL LBS DEATH LOSS/YEAR = _____

AVERAGE DEATH LOSS PER DAY = _____ / 365 = _____
(TOTAL LBS DEATH LOSS/YEAR) (LBS DEATH LOSS/DAY)